Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-19 (cancelled).

20. (currently amended) A reactor for pyrolytic conversion of biomass material into charcoal and gas comprising, a housing having a proximal end, a distal end and a sealable opening for receiving a removable canister containing said material;

a heater at said distal end located within said housing to ignite such that biomass material within said canister is ignitable to form a flame front only by heating with said heater at said distal end;

a first valved gas exit orifice at the proximal end of said housing; a second valved gas exit orifice at the distal end of said housing;

a valved air entry orifice for introducing air to the proximal end of said canister; insulation surrounding at least a portion of the sides of the canister;

said canister being receivable in said housing such that there is minimal exposure of the contents of said canister to the atmosphere when said sealable opening is open [[;]].

wherein air entry at said proximal end and ignition of biomass material to form a flame front at said distal end causes a directional draft within said reactor as air flows through said biomass material toward said distal end causing said flame front to progress through said biomass material to said proximal end.

- 21. (Previously presented) A reactor according to claim 20 wherein said heater comprises a resistance heater.
- 22. (original) A reactor according to claim 20 further comprising an exterior burner communicating with said second valved gas exit.

- 23. (original) A reactor according to claim 20 wherein said valved entry orifice comprises a tube passing through the distal end of said housing and having an open end at the proximal end of said canister.
- 24. (original) A reactor according to claim 20 wherein said housing is vertically positioned so that said proximal end is at the top and said distal end is at the bottom.